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09/393,024	09/09/1999	SUZANNE S. ALLISON	2543-128329	2147

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EXAMINER
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FELTEN, DANIEL S

ART UNIT	PAPER NUMBER
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2164

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/393,024

Applicant(s)

ALLISON ET AL.

Examiner

Daniel S Felten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 09 September 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-14 and 16-31 is/are rejected.
- 7) ☐ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2&3.                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

New formal drawings are required in this application because of the problems indicated on the Notice of Draftperson's Patent Review filed September 9, 1999. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily

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published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3, 5, 9-14, 20-24, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by "Financial Engines to Provide Internet-Based Advice for Individuals," Financial Engines, Inc. Press Release, Feb. 23, 1998 (Website: <http://www.financialengines.com>).

**As in claim 1:**

A method for determining at least one financial strategy (*optimization techniques*) for assets to meet financial goals (*personalized financial solutions or goals*), comprising the steps of determining an outcome (*recommendations*) for each of a plurality of financial strategies; and selecting at least one of the financial strategies to meet the financial goals using a software-implemented decision analysis and the outcomes for the financial strategies (see Financial Engines, paragraphs 1, 2 & 4 of the Feb 23, 1998 article).

**Regarding claim 3:**

determining the outcomes comprises the step of using a time series database of rates of return for each of the financial strategies (see Financial Engines, paragraphs 1, 2 & 4 of the Feb 23, 1998 article and the Financial Engines Website).

**As in claim 5:**

selecting at least one of the financial strategies comprises the step of selecting the financial strategy having a highest utility (see Financial Engines, paragraphs 1, 2 & 4 of the Feb 23, 1998 article and the Financial Engines Website).

**As in claim 9:**

wherein selecting at least one of the financial strategies comprises the step of using financial preferences provided by an investor (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 10:**

wherein selecting at least one of the financial strategies comprises the step of using input provided by a financial planner (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 11:**

selecting at least one of the financial strategies comprises the step of using a combination of financial preferences provided by an investor and input provided by a financial planner (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 12:**

selecting at least one of the financial strategies comprises the step of selecting a financial strategy using a heuristic based on preferences of an investor as to the financial goals (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 13:**

selecting at least one of the financial strategies comprises the step of selecting a financial strategy using a heuristic based on financial variables related to the financial strategies (see Financial Engines, paragraphs 1, 2 & 4 of the Feb 23, 1998 article).

**As in claim 14:**

selecting at least one of the financial strategies comprises the step of selecting a financial strategy using a heuristic based on preferences of an investor as to the financial goals, financial variables related to the financial strategies, and utility scores (*forecasts*) determined for the financial strategies (see Financial Engines, paragraphs 1, 2 & 4 of the Feb 23, 1998 article).

**As in claim 20:**

the financial goals are retirement financial goals (see Financial Engines, paragraphs 1, 2 & 4 of the Feb 23, 1998 article).

**As in claim 21:**

the step of providing a questionnaire for an investor, the questionnaire for determining preferences of the investor as to the financial goals (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 22:**

An information storage device embodying the questionnaire (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 23:**

the step of creating a report describing the step of determining an outcome, the step of selecting at least one of the financial strategies, and the selected at least one of the financial strategies (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 24:**

An information storage device (computer) (see Financial Engines, paragraph 4 of the Feb 23, 1998 article).

**As in claim 26:**

A computer system for performing the method of claim 1 (see Financial Engines, paragraphs 1, 2 & 4 of the Feb 23, 1998 article).

Claim 27 is rejected under 35 U.S.C. 102(e) as being anticipated by "Where does my Forecast come from? An Interview with Bill Sharpe", Financial Engines, Inc., Dated June 16, 1999 (Hereinafter referred to as the "June 1999 article") (also see the Website: <http://www.financialengines.com/>).

**As in claim 27:**

A method for determining at least one financial strategy for assets to meet financial goals, comprising the steps of: determining an outcome for each of a plurality of financial strategies using a plurality of Monte Carlo simulations for each of the financial strategies; and selecting at least one of the financial strategies to meet the financial goals using the outcomes for the financial strategies (see full Bill Sharpe article).

Claim 29 is rejected under 35 U.S.C. 102(e) as being anticipated by Financial Engines, "Risk Slider, What does the Risk Number Mean?" Dated June 18, 1999, (herein after, " the risk slider" article)  
(also see the Website: <http://www.financialengines.com/>)



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**As in claim 29:**

A computer system for determining at least one financial strategy for assets to meet financial goals, comprising:

- means for storing investor information;

- means for storing a plurality of financial strategies;

- a software-implemented projection engine for determining an outcome for each of the financial strategies using the investor information;

- a software-implemented preference model incorporating the investor information;

- means for determining a score for each of the financial strategies using the preference

- model and the outcomes from the projection engine; and

- means for selecting at least one of financial strategies based on the scores for the financial strategies (see full article and website).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Financial Engines to Provide Internet-Based Advice for Individuals," Financial Engines, Inc. Press Release, Feb. 23, 1998 (Hereinafter referred to as the "Feb 1998 article") in view of "Where does my Forecast come from? An Interview with Bill Sharpe", Financial Engines, Inc., Dated June 16, 1999 (Hereinafter referred to as the "Bill Sharpe article") (also see the Website: <http://www.financialengines.com/>)

**Regarding claim 2:**

The teachings of the Financial Engines, Inc. Press Release dated February 23, 1998 have been discussed above.

The Feb 1998 article fails to disclose performing Monte Carlo simulations for each of the financial strategies.

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The Bill Sharpe article discloses performing a plurality of Monte Carlo simulations for each of the financial strategies (see in the article discussion about the "Tornado" being based on "Monte Carlo Simulations").

It would have been obvious for an artisan of ordinary skill at the time the invention to employ Monte Carlo simulations as disclosed in the Bill Sharpe article because the technique provides the user with a range of possible outcomes (future scenarios) based upon the personal information provided by the user. The manipulation of the personal information via Monte Carlo simulations would be useful to the individual user in making vital financial (particularly retirement) decisions. Thus to employ the Monte Carlo technique to the system of the Feb 1998 article would have constituted an obvious expedient well within the ordinary skill in the art.

Claims 4-6, 8 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Financial Engines to Provide Internet-Based Advice for Individuals," Financial Engines, Inc. Press Release, February 23, 1998 in view of Whinston, A., "Efficient Selection of Suppliers over the Internet", Journal of Management Information Systems; Armonk (Spring 1997).

**Regarding claims 4-6, 8 and 28:**

The teachings of the February 1998 article have been discussed above. The February 1998 article fails to disclose the characteristics and use of the multi-attribute utility theory (MAUT) in the software decision analysis. Whinston

discloses the employment of MAUT for financial decisions over the Internet (see Whinston article, under 'Locating and Evaluating Suppliers', page 7, paragraph 4).

Multi-attribute Utility Theory (MAUT) is one of many techniques that are used in multiple decision making processes whereby user preferences are considered, and are attributed to the evaluation (or rate) of future financial gain or lost over a period of time. Consequently, It would have been obvious for an artisan of ordinary skill at the time of the invention to employ the notoriously old and well known MAUT to the Financial Engines system because an artisan of ordinary skill in the art would recognize the employment of MAUT into the Financial Engines system as an alternative to a variety of other conventional techniques that are used to provide a level of value expectancy. Thus such a modification would have been a design choice well within the ordinary skill in the art.

Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Financial Engines to Provide Internet-Based Advice for Individuals," Financial Engines, Inc. Press Release, February 23, 1998 in view of Financial Engines, "Analyzing your Portfolio", Dated June 18, 1999.

**Regarding claims 16-19:**

The teachings of the February 1998 article have been discussed above.

The February article fails to disclose a asset allocation, wherein the asset allocation comprises stocks, bonds, short term securities, etc.,

The Portfolio article discloses dividing a portfolio into asset classes of stocks, cash and bonds (see article). It would have been obvious for an artisan of ordinary skill in the art to integrate the asset allocation feature into the Financial Engine system because an artisan at the time of the invention would recognize that asset allocation and is vital to predict how a portfolio responds in different economic environments or scenarios. Therefore the employment of asset allocations to make economic decisions would have been obvious expedient to one of ordinary skill in the art.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Financial Engines to Provide Internet-Based Advice for Individuals," Financial Engines, Inc. Press Release, February 23, 1998 in view of Schrader et al (hereinafter, 'Schrader' US 5,903,881).

**Regarding claim 25:**

The teachings of the February 1998 article have been described above. The February article fails to disclose a computer-readable medium having software for performing the method of claim 1 (method being related to financial transactions and strategies over the Internet).

Schrader discloses the use of a computer-readable medium to provide the execution of a financial software program to a remote client over a network (*e.g., the Internet*). (see Schrader, col. 12, ll. 62+).

It would have been obvious for an artisan of ordinary skill at the time of the invention was made to employ a computer-readable medium having software for the execution of the aforementioned method steps found in claim 1 because an artisan would recognize that method steps are written as software programs that can be either stored to a hard drive memory or a computer-readable medium (*such as a 3.5 floppy disc, Compact disk, diskette, 8-mm tape, etc.,*). An artisan of ordinary skill at the time of the invention would also have recognized that the notoriously old and well known computer-readable medium provides a convenient way to upload, download, and execute programs without taking up needed memory space on the hard drive, while also having the ability to hand carry vital information from one location to another. Thus such a modification would have been an obvious expedient to one of ordinary skill in the art.

Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Financial Engines, Engines Investment Advisor<sup>TM</sup> Now Available for 401(k) Plan Participants", Financial Engines Inc (October 26, 1998) in view of Whinston, A., "Efficient Selection of Suppliers over the Internet", Journal of Management Information Systems; Armonk (Spring 1997).

**Regarding claims 30 and 31:**

The October 1998 article discloses all the elements that meet the claimed invention (see Article subsection, "How it works") (also see Financial Engines Website mentioned above).

The October 1998 fails to disclose employing multi-attribute theory (MAUT), to make financial decisions. Whinston discloses the employment of MAUT for financial decisions over the Internet (see Whinston article, under 'Locating and Evaluating Suppliers', page 7, paragraph 4).

Since the October 1998 article Financial Engines discloses users filling out personal information/preferences (see in the article, 'How it works'), It would have been obvious for an artisan at the time of the invention to employ the notoriously old and well known MAUT to the Financial Engines system because an artisan of ordinary skill in the art would recognize the employment of MAUT into the Financial Engines system as an alternative to a variety of conventional techniques that are used to provide a level of value expectancy (an expected value of future gain or loss over time) based upon user preferences. Thus such a modification would have been a design choice well within the ordinary skill in the art.

***Allowable Subject Matter***

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose. In combination with other features of the invention each financial strategy is determined from a multi-dimensional matrix of at least one financial variable, the multi-dimensional matrix having a plurality of cells, each cell in the multi-dimensional matrix corresponding to one of the financial strategies.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**US Patents:**

Williams et al (US 5,999,918) discloses a interactive color confidence indicators for statistical data



Ray et al (US 6,018,722) discloses a SEC registered individual account investment advisor expert system

**Non-Patented Literature:**

Daily, G.S., "How to Choose a Life Insurance Policy", *Journal of Financial Planning*; Denver; April 1994; Vol. 7, No. 2, page 71, 5pgs.

Stam, A., and Silva, P., "Stochastic judgments in AHP: The Measurement of Rank Reversal Probabilities", *Decision Sciences*; Atlanta; Summer 1997; Vol. 28, No. 3.

Gershom, M., "The Role of Weights and Scales in the Application of Multiobjective Decision Making", *European Journal of Operational Research*; Amsterdam; Feb 1984; Vol. 15, No. 2.(*Abstract only*).

Von Nitzsch, R. and Weber, M., " The Effect of Attribute Ranges on Weights in Multattribute", *Management Science*; Providence; Aug 1993; Vol. 39, No. 8 (*Abstract only*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S Felten whose telephone number is 703-305-0724. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1065. The fax phone numbers

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for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-5557 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



DSF  
January 15, 2002



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